



Economic Impact Analysis Virginia Department of Planning and Budget

9 VAC 20-70 – Financial Assurance Regulations for Solid Waste Facilities Department of Environmental Quality September 11, 2000

The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with Section 9-6.14:7.1.G of the Administrative Process Act and Executive Order Number 25 (98). Section 9-6.14:7.1.G requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. The analysis presented below represents DPB's best estimate of these economic impacts.

Summary of the Proposed Regulation

The Virginia Waste Management Act (Section 10.1-1410) requires that owners/operators of solid waste treatment facilities, transfer facilities, and disposal facilities demonstrate financial responsibility as a condition of operation to ensure that the costs of abandoning these facilities will be recovered from the person abandoning the facility. The proposed regulations require that the owners/operators of transfer stations and barge receiving facilities also provide financial assurance. Additionally, the proposed regulations change the financial test requirements for local governments with high environmental liabilities, and add financial assurance requirements for facilities that are required to monitor groundwater if they exceed the groundwater protection standards.

Estimated Economic Impact

Transfer Stations and Barge Receiving Facilities

Currently, transfer stations and barge receiving facilities are not required to demonstrate their financial wherewithal in order to operate in the Commonwealth. This proposed regulation would require the owners of these facilities to demonstrate financial responsibility. The amount of the financial assurance required will depend on the estimated costs of closure and post-closure cleanup costs. These facilities may employ various financial assurance mechanisms.

Financial responsibility can be demonstrated by: (1) financial test of self-insurance; (2) surety bond guaranteeing payment or performance; (3) letter of credit; (4) trust fund; (5) insurance; (6) certificate of deposit; (7) guarantee; or (8) multiple financial mechanisms. Based on the current experience with solid waste facilities, most local governments that own transfer stations and barge receiving facilities are expected to use the financial test of self-insurance method to meet the financial responsibility requirements. The figures in Table 1 indicates that 84% of the facilities owned by local governments have consistently used financial test of self-insurance method. This method is also popular among the private facilities. Over 23% of the private facilities have employed this method of financial assurance as can be seen in Table 1.

Under the self-insurance option, the owner/operator provides a financial statement indicating a net worth at least equal to the amount required to demonstrate financial responsibility. The financial test must be accompanied by an independent Certified Public Accountant (CPA) report. The cost of the self-insurance method would vary between \$0 - \$3,000 depending on the fees charged by the accounting firm as indicated in Table 2. Some accounting firms may not charge any fees for preparation of the CPA report. There will be essentially a small amount of staff time in document preparation as well.

The surety bond is the most used mechanism by the private facilities (28% of total). The cost of this method is about 1% to 3% of the total bond amount as indicated in Table 2. The cost may be lower depending on the financial strength of the owner/operator of the facility and the facility's condition and operation. The bonding company may require collateral if the owner/operator is not financially strong. The bond must be accompanied by a standby trust agreement that costs \$750 approximately.

Table 1

The types of financial mechanisms used by private and local government entities owning or operating solid waste facilities in Virginia.		
	Local Governments	Private Facilities
Financial Test of Self-insurance	112 (84%)	30 (23%)
Surety Bond	3 (2%)	37 (28%)
Letter of Credit	13 (10%)	26 (20%)
Trust Fund	5 (4%)	13 (10%)
Insurance Policy		9 (7%)
Certificate of Deposit		6 (5%)
Financial Test/Corporate Guarantee		9 (7%)
TOTAL	133	130
Notes:		
1) Percent of total in parentheses.		
2) The figures do not include 14 local governments, and 10 private facilities that are not required to demonstrate financial assurance, but are permitted facilities.		
Source: Department of Environmental Quality		

The cost of the letter of credit will heavily depend on the length and the quality of the relationship between the issuing institution and the owner/operator. An approximate maintenance fee is 0.75% to 2% percent of the face amount indicated in the letter of credit.

In the trust fund method, the owner/operator must incur trustee fees for managing the money. The amount of the fees depends on the amount of the money in the trust fund. In addition, the owner/operator must make annual contributions equal to the total estimated closure or post-closure clean up costs divided by the number of years in the facility's operating life.

The insurance method would cost the owner/operator 1% to 3% of the face value of the policy. These estimates may be lower for financially strong owners/operators. In the certificate of deposit method, there is no annual maintenance fee but the amount must be deposited. The guarantee method requires that a guarantor provide a letter from its financial officer demonstrating that it has adequate funding to meet the financial test requirements and that it establishes a fully funded trust fund in the event the guarantor must pay on the guarantee. The

Table 2

A comparison of the costs of obtaining a solid waste financial assurance mechanism.			
Mechanism Type	Face Amount of Financial Mechanism		
	\$500,000	\$1,000,000	\$3,000,000
Corporate Financial Test/Guarantee	\$0 to \$3,000 (Cost of CPA report)	\$0 to \$3,000 (Cost of CPA report)	\$0 to \$3,000 (Cost of CPA report)
Local Government Financial Test/Guarantee	\$0 to \$3,000 (Cost of CPA report)	\$0 to \$3,000 (Cost of CPA report)	\$0 to \$3,000 (Cost of CPA report)
Surety Bond with Standby Trust Agreement	\$5,750 to \$15,750 (1% to 3%)	\$10,750 to \$30,750 (1% to 3%)	\$30,750 to \$90,750 (1% to 3%)
Letter of Credit	\$3,750 to \$10,000 (.75% to 2%)	\$7,500 to \$20,000 (.75% to 2%)	\$22,500 to \$60,000 (.75% to 2%)
Trust Fund	\$2,500 to \$4,750 + annual payment	\$2,500 to \$6,500 + annual payment	\$2,500 to \$10,500 + annual payment
Insurance Policy	\$5,000 to \$15,000 (1% to 3%)	\$10,000 to \$30,000 (1% to 3%)	\$30,000 to \$90,000 (1% to 3%)
Certificate of Deposit	\$500,000 (one time price)	\$1,000,000 (one time price)	\$3,000,000 (one time price)

Source: Department of Environmental Quality

guarantor does incur costs in that it is accepting contingent liability. Presumably, the owner/operator will compensate the guarantor for its acceptance of that contingent liability.

The proposed regulations will require 61 transfer stations to provide financial assurance. Currently, there are no barge receiving facilities that will be required to demonstrate financial responsibility. DEQ believes there is the potential for the establishment of one to five such facilities in the future. The proof of financial responsibility is required once a year from the owners/operators of these facilities. Currently, similar facilities such as sanitary landfills and composting facilities are providing between \$3,570 and \$45,460,000 of financial assurance per facility. DEQ estimates that individual transfer stations will be required to provide between \$2,800 and \$140,000 of financial assurance per facility. According to DEQ, a total amount of \$446,053,692 in financial assurance is currently demonstrated by solid waste facilities. DEQ estimates that roughly an additional financial assurance between \$1,830,000 to \$3,660,000 will

be required from transfer stations and barge receiving facilities. The total costs of proposed financial assurance requirements to these facilities will vary depending on the method chosen.

In addition to the costs incurred by the owners/operators of the transfer and barge receiving facilities, DEQ estimates that an additional twenty hours of staff time in a week will be required for verifying the appropriateness of financial assurances required by the proposed changes.

This proposed regulation may provide some benefit to the Commonwealth in that it would force some financially unstable owners/operators to cease operations and likely sell their operations to more financially secure entities. Owners/operators that cannot demonstrate financial responsibility would be required to close their facilities. In such cases it seems likely that the owner/operator would sell their facility in order to get some return from their property. If an owner/operator is unable to pay for the closure and post-closure cleanup costs and declares bankruptcy, the state conducts the cleanup and general funds may be used to pay for it. Other alternative sources of cleanup costs, in these cases, could be the Virginia Environmental Emergency Response Fund and special funds from the Environmental Protection Agency. Thus by decreasing the number of owners/operators that are incapable of paying their share of the costs of potential cleanup costs, the proposed regulation decreases the likelihood that the state will be required to pay for the cleanup costs of a bankrupt owner/operator. This could reduce the amount of state funds used for closure and post-closure cleanup costs.

It is also possible that the proposed regulation would discourage financially weak owners/operators from purchasing these facilities. Among these potential entrants, a firm or an individual may have just enough funds to purchase a facility, but not enough to demonstrate financial responsibility to pay for their share of potential cleanup costs. Such an entity would likely be dissuaded from their purchase since they would not be permitted to operate and earn revenue. In this way, the proposed regulation could limit the number of entrants into the industry that are not capable of paying for potential cleanup costs. Again, this could reduce by a small margin the amount of state funds used for the closure and post-closure costs of these facilities.

Reducing the number of owners/operators that are incapable of paying their share of the closure and post-closure cleanup costs would likely also reduce some delays in cleanup. Thus, the proposed regulation has the potential to decrease the frequency and the length of cleanup

delays, which would be beneficial for the environment as well as for third parties affected by the closure.

Additionally, it seems probable that financially troubled owners/operators are less likely to incur the expense of proper maintenance and safety procedures than would more financially secure owners/operators. Thus, reducing the number of owners/operators that are incapable of paying their share of the costs of closure may to a small degree decrease the likelihood of the need for closure and post-closure cleanup.

Local Governments with High Environmental Liabilities

The proposed changes will require local governments whose environmental liabilities at their waste facilities are between 20% to 43% percent of their total annual revenues, and who wish to meet the financial assurance requirement via the financial test of self-insurance to establish a restricted sinking fund or escrow account in addition to passing the financial test of self-insurance. According to DEQ, seven local governments fall into this category. Thus, these seven local governments will be required to establish a restricted sinking fund or an escrow account, or switch to a different method of meeting the financial assurance regulation. Restricted sinking funds are similar to savings accounts. The local government would set money aside on a periodic basis that could not be used for anything else. The escrow account involves appointing a third party such as a bank or attorney to escrow the account. The escrow agent requires a fee for the services. The local governments could use interest earned by the sinking fund or the escrow account for other purposes as they wish.

Both methods will require the local governments to put the required amount of money aside on a periodic basis. Although these funds can earn interest, the localities will not have discretion on using the principal. This feature of the proposed changes may introduce some difficulties on revenue-expenditure designations. In cases where revenues are just enough to cover expenditures, some of the localities may have to increase their revenues by increasing taxes or they may have to reduce their expenditures. The possible ways of readjusting revenue-expenditure relationships is beyond the scope of this analysis. In cases where the local government is able to borrow at the interest rate applied to these funds no real effect should be expected. However, the interest rate on the borrowed funds will, in general, depend on many other individual characteristics of the locality such as its borrowing capacity and financial

strength. Thus, it would be likely that most local governments can expect to pay a higher interest rate on the borrowed funds than the interest rate they receive on the funds set aside.

Requiring the local governments that have high environmental liabilities to establish a restricted sinking fund or an escrow account would likely reduce some delays in cleanup. The local governments that can pass the financial test of self-insurance may require significant time to adjust revenue-expenditure designations in order to raise funds required for cleanup. In addition the funds required for cleanup may be large for these localities since they have high environmental liabilities. Thus the proposed regulation has the potential to decrease the length of cleanup delays since the sinking fund or escrow account could be used immediately for cleanup. Reducing the delays in clean up would be beneficial for the environment as well as for third parties affected by the closure.

Additionally, these seven local governments may need to revise their annual budgets to incorporate the costs associated with establishing a restricted sinking fund or an escrow account. This may introduce a small amount of additional costs to revise their annual budgets.

Facilities Required to Monitor Groundwater

With the proposed changes, solid waste facilities required to monitor groundwater will be required to provide an additional \$1 million in financial assurance when the ground water protection standards are exceeded. Currently, the total number of landfill facilities is 198. DEQ roughly expects only 10 to 20 of these facilities to not meet the groundwater protection standards. Thus, these 10 to 20 facilities will be required to provide \$1 million financial assurance.

The costs of financial assurance are essentially the same as the costs estimated in Table 2. However, the required amount of the financial assurance from these facilities is a standard \$1 million regardless of the cost estimate of closure and post-closure cleanup. Similar to the transfer stations, this proposed regulation might provide some benefit to the Commonwealth in that it would force some financially unstable owners/operators of facilities required to monitor groundwater to cease operations and likely sell their operations to more financially secure entities. Owners/operators of the facilities exceeding groundwater protection standards that cannot demonstrate financial responsibility would be required to close their facilities. In such

cases it seems likely that the owner/operator would sell their facility in order to get some return from their property. Thus, by decreasing the number of owners/operators that are incapable of paying their share of potential cleanup costs, the proposed regulation decreases the likelihood that the state will be required to pay for the cleanup costs of a bankrupt owner/operator. This could reduce the amount of state funds used for closure and post-closure cleanup costs of facilities that are exceeding groundwater protection standards.

It is also possible that the proposed regulation would discourage financially weak owners/operators from purchasing these facilities that are exceeding groundwater protection standards. Among these potential entrants, a firm or an individual may have just enough funds to purchase a facility, but not enough to demonstrate financial responsibility to pay for their share of potential cleanup costs. Such an entity would likely be dissuaded from their purchase since they would not be permitted to operate and earn revenue. In this way, the proposed regulation could limit the number of entrants into the industry that are not capable of paying for potential cleanup costs. This could reduce by a small margin the amount of state funds used for the closure and post-closure costs of these facilities.

Reducing the number of owners/operators that are incapable of paying their share of the closure and post-closure cleanup costs would likely also reduce some delays in cleanup. Thus the proposed regulation has the potential to decrease the frequency and the length of cleanup delays, which would be beneficial for the environment as well as for third parties affected by the closure. Decreasing the frequency and length of cleanup delays would reduce the length of time the public is exposed to contaminate ground water.

Additionally, it seems probable that financially troubled owners/operators are less likely to incur the expense of proper maintenance and safety procedures than would more financially secure owners/operators. Thus, reducing the number of owners/operators that are incapable of paying their share of the costs of closure may to small degree decrease the likelihood of the need for closure and post-closure cleanup.

Summary

In summary, the benefits of these proposed amendments to the regulation include the potential for significant reduction in state expenditures on cleanup costs and reduced delays in cleanup, which in turn would minimize the public's exposure to potential health risks. The costs

derive from additional financial assurance responsibilities for certain owners/operators, and financial assurance responsibilities for two new categories. Demonstrating financial responsibility would involve costs that vary depending upon the situation of the facility owner/operator. Though it seems probable that the potential benefits of the proposed regulation outweigh the potential costs, there is insufficient data to determine that conclusively.

Businesses and Entities Affected

The proposed changes to the regulation will affect the 61 transfer facility owners/operators, seven local governments with high level of environmental liabilities, and about 10 to 20 facilities required to monitor groundwater standards.

Localities Particularly Affected

The proposed changes to the regulation affect localities throughout the Commonwealth.

Projected Impact on Employment

The proposed changes to this regulation are not expected to significantly affect net employment. A small number of financially weak operators may cease operations. But more financially secure operators, who would likely employ approximately the same number of workers, would most likely purchase those facilities.

Effects on the Use and Value of Private Property

The value of facilities whose owners/operators are unable to demonstrate financial responsibility will decrease from their perspective.